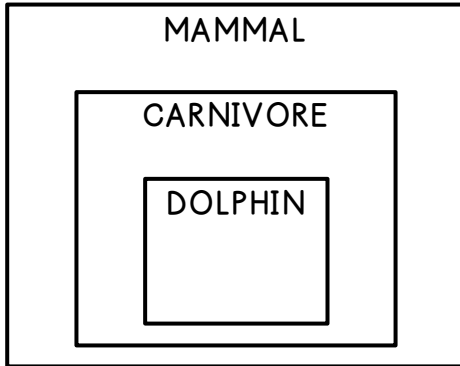
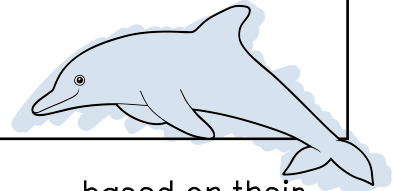


CLASSIFYING RATIONAL NUMBERS

In biology class, students are learning to classify different animals into the diagram below.



- If an animal is a dolphin, are they also a mammal? Why or why not?
- If an animal is a carnivore, are they also a dolphin?
- If you are asked to classify a horse, in which part of the diagram does it belong?

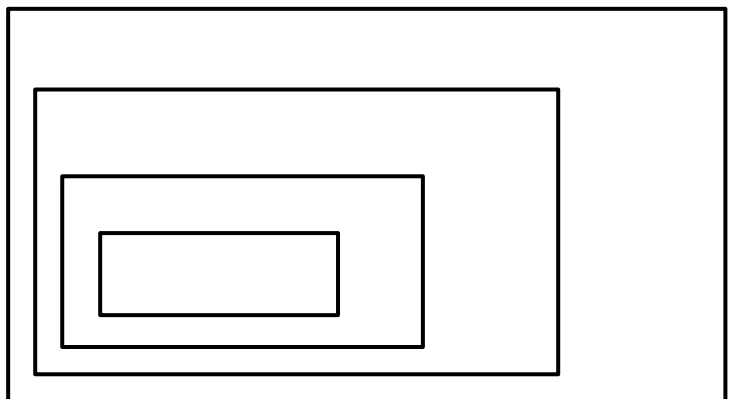


The number system classifies numbers into _____ and _____ based on their type and characteristics.

NATURAL NUMBERS	<ul style="list-style-type: none"> The set of <u>Positive</u> integers $\frac{4}{2}$ <u>No Zero</u> Examples: _____
WHOLE NUMBERS	<ul style="list-style-type: none"> The set of all <u>positive</u> counting numbers starting with <u>0</u> Examples: <u>0, 1, 2, 3, 4, 5</u>
INTEGERS <i>I See on The Number line</i>	<ul style="list-style-type: none"> The set of whole numbers and their <u>opposites</u> Examples: <u>-1, 0, 1, 2</u>
RATIONAL NUMBERS	<ul style="list-style-type: none"> Numbers that can be written as fractions, terminating decimals, and <u>repeating</u> decimals Examples: <u>-5.6, $-\frac{3}{4}$, $3\frac{1}{2}$</u>

1. Place the headings for each type of number in the graphic organizer at the right. Then, write the following values in the box where they belong.

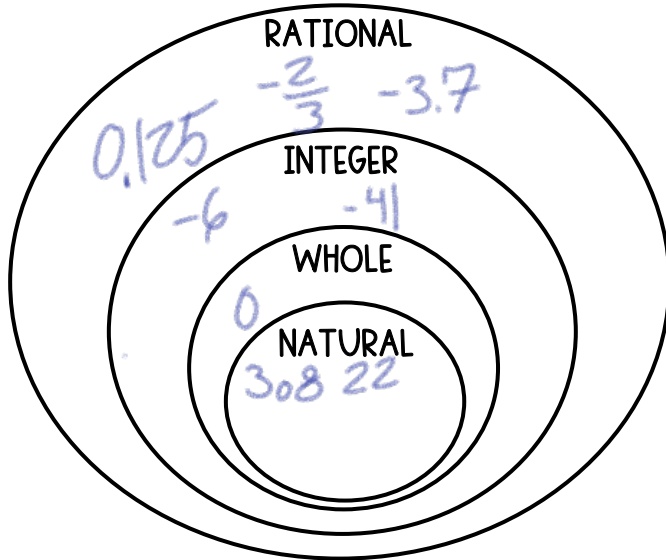
$\frac{16}{4}$	-19	$\frac{3}{5}$
3^2	0	-6.1



Use your understanding of the number system to answer the questions below.

2. Use the graphic organizer below to correctly place each of the following values.

0.125 , 308 , -6 , $-\frac{2}{3}$, 0 , -41 , -3.7 , 22 , $\frac{4}{5}$



3. Four different statements about the number system are written below. Determine which statements are true and which are false. Correct any false statements.

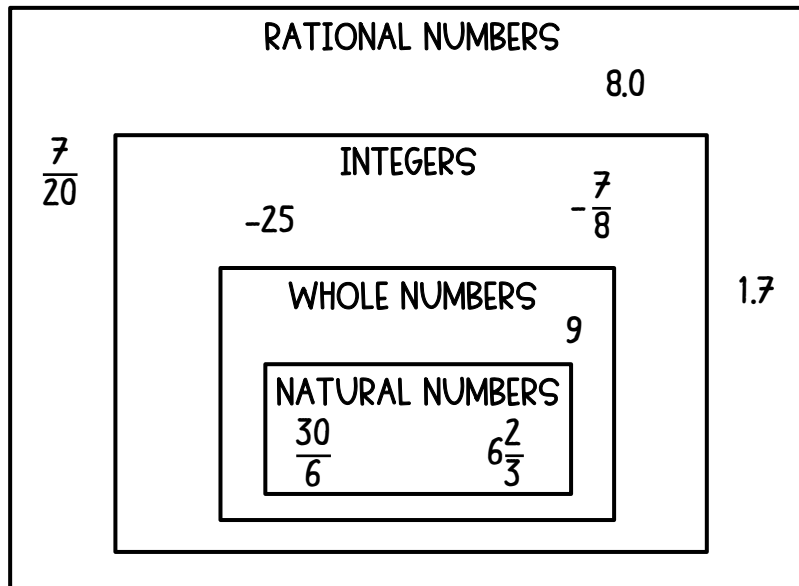
#1: A rational number is always an integer

#2: All natural numbers are integers

#3: All negative numbers are rational numbers

#4: All rational numbers are either fractions or decimals

4. The students in Mrs. Caldwell's class sorted eight different numbers into a diagram representing the number system. Determine if the numbers listed are in the correct location and correctly label any numbers that are misplaced.



-25 : _____

$-\frac{7}{8}$: _____

$\frac{7}{20}$: _____

9 : _____

1.7 : _____

8.0 : _____

$\frac{30}{6}$: _____

$6\frac{2}{3}$: _____

Summarize today's lesson: